

Date: Sun, 3 Jul 94 04:30:28 PDT
From: Ham-Homebrew Mailing List and Newsgroup <ham-homebrew@ucsd.edu>
Errors-To: Ham-Homebrew-Errors@UCSD.Edu
Reply-To: Ham-Homebrew@UCSD.Edu
Precedence: Bulk
Subject: Ham-Homebrew Digest V94 #181
To: Ham-Homebrew

Ham-Homebrew Digest Sun, 3 Jul 94 Volume 94 : Issue 181

Today's Topics:

 AM Transmitter (2 msgs)
 CW Timings
 Help determining cap values (2 msgs)
 RF PROBE FOR 800/900MHZ

Send Replies or notes for publication to: <Ham-Homebrew@UCSD.Edu>
Send subscription requests to: <Ham-Homebrew-REQUEST@UCSD.Edu>
Problems you can't solve otherwise to brian@ucsd.edu.

Archives of past issues of the Ham-Homebrew Digest are available
(by FTP only) from UCSD.Edu in directory "mailarchives/ham-homebrew".

We trust that readers are intelligent enough to realize that all text
herein consists of personal comments and does not represent the official
policies or positions of any party. Your mileage may vary. So there.

Date: 2 Jul 1994 12:48:45 GMT
From: ihnp4.ucsd.edu!agate!usenet.ins.cwru.edu!po.cwru.edu!sct@network.ucsd.edu
Subject: AM Transmitter
To: ham-homebrew@ucsd.edu

In article <acarhartCs9vFq.Joz@netcom.com>,
ALL-A-N Carhart <acarhart@netcom.com> wrote:
> As long as I keep this extremely low power, (battery operated I hope),
> does anyone know if the FCC would complain?

It is legal to transmit within the AM broadcast band without a license
as long as you adhere to certain limits on power and antenna. Your
idea sounds perfectly reasonable to me -- you won't have any problem
going a couple of feet with a legal transmitter.

The last time I built one of these, I was in fifth grade, playing with
a Radio Shack electronics kit. There are also designs for simple AM
transmitters in the Radio Shack _Mini Engineer's Notebook_ volume,
"Communications Projects". Finally, Ramsey Electronics and JDR Microdevices

sell at least one AM transmitter kit. The catalog descriptions leave open the question of whether these kits operate at legal power output.

> What if I'm stopped in traffic and the car next to me can pick up
> my signal? Is That illegal?

Good question. I haven't read Part 15, but it's almost certainly your responsibility to resolve any interference you cause with the transmitter. If you want to be sure you're legal, look up 47 CFR 15 and check out the real rules. (How? Good question. I'd guess a big library, perhaps a government depository library, would have it.)

Obligatory ham radio: Has anyone built a ham rig from an RS electronics kit? It would be fun to fill in the equipment field of a QSL card with, "RS 75-in-1 Electronics Kit". :-)

Stephen

--

Stephen Trier
sct@po.cwru.edu
KG8IF

Date: Sat, 2 Jul 94 06:09:38 GMT
From: ihnp4.ucsd.edu!library.ucla.edu!europa.eng.gtefsd.com!uhog.mit.edu!
news.mtholyoke.edu!news.umass.edu!usenet@network.ucsd.edu
Subject: AM Transmitter
To: ham-homebrew@ucsd.edu

In Article <acarhartCs9vFq.Joz@netcom.com>
acarhart@netcom.com (ALL-A-N Carhart) writes:

>Why not hook up a CD player (or tape player or even FM radio) to a transmitter,
>with the power to only go a few feet...
>The device will sit on the passenger's lap, and have enough power to
>transmit to the car stereo, sitting in the front of the car.
>
>We will trasmit, let's say on 1590 KHz, and then tune the car's stereo
>to 1590....
>

I'm old enough to remember when such transmitters were commonly used in household equipment. The 78 rpm record player my family had when I was very young used such a transmitter, you tuned an a.m. receiver to 530 khz. (kc. in those days) and there it was. I know this because by the time I became a teenager I had taken the thing apart for parts for my

ham projects.

There are differences between the old 1940's style wireless record players and the situation you describe, however. In the old days tube type equipment all operated from the a.c. power line and the a.m. signal was generally coupled to the power cord, which would then couple the signal to an a.m. radio plugged into the same circuit. For your application you will probably need some kind of antenna. Also, car radios are generally pretty carefully designed with metal cases, bypassed power leads, and shielded leads to the car antenna so that they won't pick up any of the radio noise that is generated by the ignition system and other parts of the car electrical system. You might find it difficult to pick up a signal originating inside the car.

There are cheap wireless microphones sold as toys which work the way you describe. I got one for 50 cents at a neighborhood tag sale. You might look around for a cheap way to test your plan -- give it a try.

73, Al N1AW

Albert S. Woodhull
Hampshire College, Amherst, MA, USA
awoodhull@hamp.hampshire.edu

Date: 29 Jun 1994 17:48:28 GMT
From: eng.iac.honeywell.com!alf@uunet.uu.net
Subject: CW Timings
To: ham-homebrew@ucsd.edu

Date: 2 Jul 94 09:09:50 EST
From: ccsua.ctstateu.edu!white@yale.arpa
Subject: Help determining cap values
To: ham-homebrew@ucsd.edu

I'm building the 7MHz Optimized rig & I need some help determining the values of 4 caps:

1. Orange, square plate, "CE 309 C"
2. Orange, "331 A1J" on 1 side & "348 RF0" on the other
3. Blue, only has "333" on it
4. Blue, "33J" and "5A"

Any help or mini-treatises on caps/cap markings appreciated. The above caps do not match up with any of the labeling schemes laid out in the handbook.

73 de N1QVE
Harry
white@csusys.ctstateu.edu

Date: 2 Jul 1994 08:40:08 -0700
From: ihnp4.ucsd.edu!agate!barrnet.net!nntp.crl.com!crl2.crl.com!not-for-mail@network.ucsd.edu
Subject: Help determining cap values
To: ham-homebrew@ucsd.edu

white@ccsua.ctstateu.edu wrote:

: I'm building the 7MHz Optimized rig & I need some help determining
: the values of 4 caps:
: 1. Orange, square plate, "CE 309 C"

No Idea...

: 2. Orange, "331 A1J" on 1 side & "348 RF0" on the other

330 PF 331 means 33 followed by one "0" in PF

: 3. Blue, only has "333" on it

.033 uF This is 33 followed by three "0"s in PF

: 4. Blue, "33J" and "5A"

33 PF A "J" or "K" can be replaced by a decimal point. J and K are
different tolerances (but I forget which is which).

A cap marked 3K3, for example, would be 3.3 PF.

Hope this helps!

--

Don Miller Electronic System Products
dmiller@crl.com

Date: 1 Jul 1994 14:33:28 -0700
From: ihnp4.ucsd.edu!usc!elroy.jpl.nasa.gov!ncar!asuvax!pitstop.mcd.mot.com!
mcdphx!schbbs!mothost!mdisea!not-for-mail@network.ucsd.edu

Subject: RF PROBE FOR 800/900MHZ
To: ham-homebrew@ucsd.edu

We have a number of 800 and 900 MHz radios here in our lab that are in need of troubleshooting. Does anyone out there have any ideas on constructing a "sniffer" for these frequencies? I was thinking of a *tiny* wire loop that would run into the RF port of a mixer. The LO port would receive $f_c - 1\text{MHz}$. The IF would give an envelope capable of display on a scope. Alternatively the wire loop could run directly into a power meter. Put the loop on the end of a plastic probe, place the loop near the signal of interest, watch the display.

Whaddayathink?

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Hugh Shane           | 206 487 5909 (PST)  
Motorola Wireless Data | N7UAX  
shane@mdd.comm.mot.com | #include <std_disclaimer.h>  
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End of Ham-Homebrew Digest V94 #181
